

Requested Patent: DE19512315A1

Title:

WATER TANK FOR MOBILE HOMES, CARAVANS AND CAMPING PURPOSES ;

Abstracted Patent: DE19512315 ;

Publication Date: 1996-10-02 ;

Inventor(s): SCHWETJE, MATTHIAS (DE) ;

Applicant(s): SCHWETJE MATTHIAS (DE) ;

Application Number: DE19951012315 19950401 ;

Priority Number(s): DE19951012315 19950401 ;

IPC Classification: B60R15/00; B65D90/04 ;

Equivalents: ;

ABSTRACT:

The tank is divided into a compartment for fresh water and a compartment for drain water by a movable film so that the ratio between fresh and drain water is variable. The dividing film adapts to the inside of the tank by dishing of its form, and is clamped flat by its edge between the two tank halves, and consequently the two sections of the water tank are sealed one against the other.

Description

It is known that for example mobile homes so far transport two separate containers, i.e. one for the freshwater needed and the other for retaining wastewater. Consequently the problem arises that in comparison to the amount of water transported, double the amount of container volume must be present. Especially for mobile uses a space saving solution would be desirable. The only known solution consists in that the waste water container is considerably smaller than the fresh water container. This, however, often causes problems with the disposal, as the volume of the waste water container does not measure up to the fresh water consumed. The problem to be solved by the presently claimed invention consists in a reduction of the container volume required for the intake of all the transported water without requiring that the waste water be disposed of prematurely. This problem is solved by the characteristics of the moveable separating foil described in the patent claims.

An embodiment of the invention is elucidated by means of an illustration.

The illustration shows the water container in an empty state.

In the illustration the water container is shown with the upper container part (4) with the lower container part (5) and with the separating foil (3) in between them. The separating foil thereby fulfils two tasks:

- I. It forms the barrier between fresh and waste water.
- II. It seals the container halves (4+5) from each other.

Furthermore the water container is fitted with the following fixtures:

- (6) Filling opening for freshwater
- (7) Fresh water removing hose with plunger
- (8) Waste water supply tributary

- (9) Waste water drain
- (10) Vent for the bottom half of the container
- (11) Vent for the upper half of the container

The water container is filled with fresh water via the filling opening (6), whereby the separating foil (3) is in contact with the lower container half and thereby vents the waste water part (2) via the vent (10).

After the tapping of fresh water through the fresh water removing hose with plunger (7) the container half (1) can vent via the vent (11).

As soon as the fresh water has become waste water, it can enter the waste water part (2) of the container via the waste water tributary (8), thereby moving the separating foil upwards.

This process can repeat itself until all the fresh water is emptied and the waste water part (2) is filled.

Before the container can be refilled the waste water must be disposed of via the waste water drain (9).

The advantages achieved by this invention consist in that instead of needing a container volume that is twice the volume of the water transported, only once that volume is required; furthermore the water container is capable of holding the entire waste water produced.

The moveable separating foil of the water container makes it possible to use the volume no longer occupied by fresh water, for the intake of waste water.

Patent Claims

1. Water container for mobile use, for example in a mobile home, camper van or for camping use, characterized in that the water container is partitioned into a part for fresh water and a

part for waste water by a moveable separating foil, so that the ratio between fresh and waste water is variable.

2. Moveable separating foil according to claim 1, characterized in that the separating foil adapts to the shape of the water container through deep-drawing.
3. Moveable separating foil according to claim 1 and 2, characterized in that the separating foil is smoothly clamped between the two water container parts, thereby sealing both parts from each other.